

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

1-7. (Cancelled).

8. (Currently Amended) A vacuum cleaner comprising:

a cyclonic airflow chamber that facilitates the separation of contaminants from a suction airstream, said airflow chamber including a chamber inlet and an axial chamber outlet, said chamber inlet being fluidically connected with at least one of a suction nozzle and an above-the-floor cleaning tool;

an exhaust filter housing including an exhaust plenum;

a primary filter assembly mounted in said cyclonic airflow chamber upstream from said suction source for filtering contaminants from said suction airstream;

a suction source housing;

a suction duct connecting said axial chamber outlet with said suction source housing, said suction duct surrounded by said filter assembly and extending downward along an axis of said cyclonic airflow chamber;

a suction source positioned within said suction source housing, said suction source including a suction inlet communicating with said suction duct and an exhaust outlet communicating with said exhaust filter housing; and

a diverter located at said chamber inlet, wherein said diverter directs said suction airstream to flow tangentially within said chamber.

9. (Cancelled).

10. (Currently Amended) The vacuum cleaner of claim [[9]] 8, wherein said primary filter assembly includes a filter element with a polytetrafluoroethylene (PTFE) filter medium.

11. (Cancelled).

12. (Previously Presented) The vacuum cleaner of claim 8, wherein said diverter is associated with a lid that is removable from said chamber.

13. (Previously Presented) A vacuum cleaner comprising:
a cyclonic airflow chamber that facilitates the separation of contaminants from a suction airstream, said airflow chamber including a first chamber inlet, a second chamber inlet spaced from said first chamber inlet, and an axial chamber outlet, wherein said first chamber inlet communicates with a suction nozzle and said second chamber inlet communicates with an above-the-floor cleaning tool;
an exhaust filter housing including an exhaust plenum;
a suction source housing;
a suction source positioned within said suction source housing, said suction source including a suction inlet communicating with a suction duct and an exhaust outlet communicating with said exhaust filter housing; and
a diverter located at said chamber inlet, wherein said diverter directs said suction airstream to flow tangentially within said chamber.

14. (Previously Presented) The vacuum cleaner claim 8, further comprising an exhaust filter positioned within said exhaust filter housing.

15. (Original) The vacuum cleaner of claim 14, wherein said exhaust filter comprises a high efficiency particulate arrest (HEPA) filter medium.

16. (Previously Presented) The vacuum cleaner of claim 14, wherein the cyclonic airflow chamber, exhaust filter housing, and suction source housing are associated with a vacuum cleaner upper assembly, and the vacuum cleaner upper assembly is pivotally secured to a nozzle base.

17. (Currently Amended) The A vacuum cleaner of claim 16, comprising:
a cyclonic airflow chamber that facilitates the separation of contaminants from a suction airstream, said airflow chamber including a chamber inlet and an axial chamber outlet, said chamber inlet being fluidically connected with at least one of a suction nozzle and an above-the-floor cleaning tool;
an exhaust filter housing including an exhaust plenum;

a suction source housing;

a suction duct connecting said axial chamber outlet with said suction source housing, said suction duct extending along an axis of said cyclonic airflow chamber;

a suction source positioned within said suction source housing, said suction source including a suction inlet communicating with said suction duct and an exhaust outlet communicating with said exhaust filter housing; and

a diverter located at said chamber inlet, wherein said diverter directs said suction airstream to flow tangentially within said chamber, wherein the cyclonic airflow chamber, exhaust filter housing, and suction source housing are associated with a vacuum cleaner upper assembly, and the vacuum cleaner upper assembly is pivotally secured to a nozzle base and said chamber outlet, said suction duct, and said suction inlet are axially positioned parallel to a central longitudinal axis of the upper assembly.

18. (Previously Presented) A vacuum cleaner comprising:

a cyclonic airflow chamber that facilitates the separation of contaminants from a suction airstream, said airflow chamber including a chamber inlet and an axial chamber outlet, said chamber inlet being fluidically connected with at least one of a suction nozzle and an above-the-floor cleaning tool;

an exhaust filter housing including an exhaust plenum;

a suction source housing;

a suction source positioned within said suction source housing, said suction source including a suction inlet communicating with a suction duct and an exhaust outlet communicating with said exhaust filter housing;

a bleed air port communicating with said suction duct; and

a diverter located at said chamber inlet, wherein said diverter directs said suction airstream to flow tangentially within said chamber.

19. (Original) The vacuum cleaner of claim 8, wherein said cyclonic airflow chamber is defined by a dirt cup that retains debris separated from said suction airstream, said dirt cup being removable from the exhaust filter housing.

20. (Original) The vacuum cleaner of claim 19, further including a primary filter assembly centrally mounted within said dirt cup, said cyclonic airflow chamber being defined between said dirt cup and said primary filter assembly.

21. (Previously Presented) A vacuum cleaner comprising:
 - a base unit;
 - a housing pivotally mounted on said base unit;
 - a suction source mounted to one of said base unit and said housing;
 - a dirt receptacle mounted to said housing, said dirt receptacle comprising a base wall, a side wall and an open upper end;
 - a filter removably mounted in said dirt receptacle;
 - a lid selectively covering said open upper end of said dirt receptacle, wherein said lid comprises a diverter wall to channel an airstream flowing into said dirt receptacle into a cyclonic flow; and
 - a stem extending from said base wall of said dirt receptacle.
22. (Cancelled)
23. (Previously Presented) The vacuum cleaner of claim 21 wherein said stem surrounds an opening extending through said base wall.
24. (Previously Presented) The vacuum cleaner of claim 21 wherein said filter is mounted on said stem.
25. (Previously Presented) The vacuum cleaner of claim 24 wherein said filter sealingly engages said stem.
26. (Previously Presented) The vacuum cleaner of claim 25 wherein said filter comprises a filter ring engaging said stem.
27. (Previously Presented) The vacuum cleaner of claim 21 wherein said filter comprises a pleated filter medium.
28. (Previously Presented) The vacuum cleaner of claim 21 further comprising a frame for supporting said filter.

29. (Previously Presented) The vacuum cleaner of claim 21 wherein said stem is of one piece with said dirt receptacle.

30. (Previously Presented) The vacuum cleaner of claim 21 wherein said stem extends approximately parallel to said side wall of said dirt receptacle.

31. (Previously Presented) The vacuum cleaner of claim 21 further comprising a raised area located on said dirt receptacle base wall.

32. (Previously Presented) The vacuum cleaner of claim 31 wherein said stem protrudes from said raised area.

33. (Previously Presented) The vacuum cleaner of claim 21 wherein said filter is approximately cylindrical in shape.

34. (Previously Presented) The vacuum cleaner of claim 33 wherein said filter comprises a thermoplastic material.

35. (Previously Presented) A vacuum cleaner comprising:
a nozzle base comprising a suction inlet;
a housing pivotally mounted on said nozzle base;
a suction source mounted to one of said nozzle base and said housing, said suction inlet communicating with said suction source;
a dirt receptacle mounted to said housing, said dirt receptacle comprising a base wall, a side wall and an open upper end;
a stem protruding from said base wall;
a filter assembly, comprising a first filter, removably mounted on said stem; and,
a lid selectively covering an open upper end of said dirt receptacle, wherein said lid comprises a diverter wall for directing airflow into said dirt receptacle.

36. (Previously Presented) The vacuum cleaner of claim 35 further comprising a second filter, spaced from said first filter.

37. (Previously Presented) The vacuum cleaner of claim 36 wherein at least one of said first and second filters comprises a high efficiency particulate arrest (HEPA) filter material.

38. (Previously Presented) The vacuum cleaner of claim 35 wherein said stem surrounds an opening extending through said base wall.

39. (Previously Presented) The vacuum cleaner of claim 35 wherein said filter assembly sealingly engages said stem.

40. (Previously Presented) The vacuum cleaner of claim 39 wherein said filter assembly comprises a filter ring engaging said stem.

41. (Previously Presented) The vacuum cleaner of claim 35 wherein said filter assembly comprises a closed upper end.

42. (Previously Presented) The vacuum cleaner of claim 41 wherein said upper end comprises a cap.

43. (Previously Presented) The vacuum cleaner of claim 35 wherein said first filter comprises a pleated filter medium.

44. (Previously Presented) The vacuum cleaner of claim 35 wherein said filter assembly further comprises a frame for supporting said first filter.

45. (Previously Presented) The vacuum cleaner of claim 35 wherein said stem is of one piece with said dirt receptacle.

46. (Previously Presented) The vacuum cleaner of claim 35 wherein said stem extends approximately parallel to said side wall of said dirt receptacle.

47. (Previously Presented) The vacuum cleaner of claim 35 further comprising a raised area located on said dirt receptacle base wall.

48. (Previously Presented) The vacuum cleaner of claim 47 wherein said stem protrudes from said raised area.

49. (Previously Presented) The vacuum cleaner of claim 35 wherein said filter assembly is approximately cylindrical in shape.

50. (Currently Amended) A vacuum cleaner comprising:
a base unit, including a nozzle opening;
a housing pivotally mounted on said base unit;
a suction source mounted to said housing and communicating with said nozzle opening;
a dirt receptacle mounted to said housing, said dirt receptacle comprising a base wall, a side wall and an open upper end, said dirt receptacle comprising a filtration chamber;
a filter removably mounted in said filtration chamber, the filter comprising a closed upper end;
a lid selectively covering said open upper end of said dirt receptacle;
an inlet to said filtration chamber, said inlet being located in said lid; and,
an outlet from said filtration chamber, said outlet being located on said dirt receptacle base wall.

51. (Previously Presented) A vacuum cleaner comprising:
a base unit, including a nozzle opening;
a housing pivotally mounted on said base unit;
a suction source mounted to one of said base unit and said housing and communicating with said nozzle opening;
a dirt receptacle mounted to said housing, said dirt receptacle comprising a base wall, a side wall and an open upper end, said dirt receptacle comprising a filtration chamber;
a filter removably mounted in said filtration chamber;
a lid selectively covering said open upper end of said dirt receptacle;
an inlet to said filtration chamber, said inlet being located in said lid; and,

an outlet from said filtration chamber, said outlet being located on said dirt receptacle base wall said outlet of said filtration chamber comprises a stem protruding from said dirt receptacle base wall.

52. (Previously Presented) The vacuum cleaner of claim 51 wherein said stem surrounds an opening extending through said base wall.

53. (Previously Presented) The vacuum cleaner of claim 51 wherein said filter sealingly engages said stem.

54. (Previously Presented) The vacuum cleaner of claim 53 wherein said filter comprises a filter ring engaging said stem.

55. (Previously Presented) The vacuum cleaner of claim 51 wherein said stem is of one piece with said dirt receptacle.

56. (Previously Presented) The vacuum cleaner of claim 51 wherein said stem extends approximately parallel to said side wall of said dirt receptacle.

57. (Previously Presented) The vacuum cleaner of claim 51 further comprising a raised area located on said dirt receptacle base wall.

58. (Previously Presented) The vacuum cleaner of claim 51 wherein said lid comprises a diverter wall to channel an airstream flowing into said filtration chamber into a cyclonic flow.

59. (Currently Amended) The vacuum cleaner of claim [[50]] 51 wherein said filter comprises a closed upper end.

60. (Currently Amended) The vacuum cleaner of claim [[59]] 50 wherein said upper end comprises a cap.

61. (Previously Presented) The vacuum cleaner of claim 50 wherein said filter comprises a pleated filter medium.

62. (Previously Presented) The vacuum cleaner of claim 50 further comprising a frame for supporting said filter.

63. (Previously Presented) A vacuum cleaner comprising:
a base unit, including a nozzle opening;
a housing pivotally mounted on said base unit;
a dirt receptacle mounted to said housing, said dirt receptacle comprising a base wall, a side wall and an open upper end, said dirt receptacle comprising a filtration chamber;
a filter removably mounted in said filtration chamber;
a suction source mounted to one of said base unit and said housing and communicating with said nozzle opening via said filtration chamber;
a lid selectively covering said open upper end of said dirt receptacle;
a tangential inlet to said filtration chamber, said inlet being located in said lid; and,
an axial outlet from said filtration chamber, said outlet being located on said dirt receptacle base wall, said outlet of said filtration chamber comprising a stem protruding from said dirt receptacle base wall.

64. (Cancelled).

65. (Previously Presented) The vacuum cleaner of claim 63 wherein said stem surrounds an opening extending through said base wall.

66. (Previously Presented) The vacuum cleaner of claim 65 wherein said filter sealingly engages said stem.

67. (Previously Presented) The vacuum cleaner of claim 63 wherein said axial outlet from said filtration chamber communicates with an inlet of said suction source.

68. (Previously Presented) The vacuum cleaner of claim 63 wherein said stem is of one piece with said dirt receptacle.

69. (Previously Presented) The vacuum cleaner of claim 63 wherein said stem extends approximately parallel to said side wall of said dirt receptacle.

70. (Previously Presented) The vacuum cleaner of claim 63 wherein said stem extends approximately parallel to said side wall of said dirt receptacle.

71. (Previously Presented) The vacuum cleaner of claim 63 further comprising a raised area located on said dirt receptacle base wall.

72. (Previously Presented) The vacuum cleaner of claim 71 wherein said stem is positioned on said raised area.

73. (Previously Presented) A vacuum cleaner comprising:
a base unit, including a nozzle opening;
a housing pivotally mounted on said base unit;
a dirt receptacle mounted to said housing, said dirt receptacle comprising a base wall, a side wall and an open upper end, said dirt receptacle comprising a filtration chamber;
a filter removably mounted in said filtration chamber, said filter comprising a closed upper end;
a suction source mounted to one of said base unit and said housing and communicating with said nozzle opening via said filtration chamber;
a lid selectively covering said open upper end of said dirt receptacle;
a tangential inlet to said filtration chamber, said inlet being located in said lid; and,
an axial outlet from said filtration chamber, said outlet being located on said dirt receptacle base wall.

74. (Previously Presented) The vacuum cleaner of claim 73 wherein said upper end comprises a cap.

75. (Previously Presented) The vacuum cleaner of claim 63 wherein said filter comprises a pleated filter medium.

76. (Previously Presented) The vacuum cleaner of claim 63 further comprising a frame for supporting said filter.

77. (Previously Presented) The vacuum cleaner of claim 63 wherein said tangential inlet to said filtration chamber comprises a diverter wall located on said lid.